

REMARKS

Interview Summary

Applicants thank Examiner Alter for the courtesies extended during the telephone interview conducted with Bill Gowanlock and Bill Isaacs, Applicants' representative, on August 25, 2010. During that interview, Applicants' representative and the Examiner discussed the features of independent Claim 1 that distinguish the claimed invention from the documents cited in the Office Action. As discussed in detail below, the cited documents do not teach or suggest, either alone or in combination, each limitation recited in independent claim 1 and similarly recited in the other independent claims.

Status of the Claims

Claims 1, 2, 4, 5, and 7-48 are pending in the present application. Claims 1, 8, 36, and 40 are independent. Applicants have amended independent claims 1, 8, 36, and 40, and dependent claims 2, 4-5, 9, 15, 33, 41-44, and 46-48. No new matter has been added.

Unless explicitly stated otherwise, none of the amendments to the claims were made for reasons substantially related to the statutory requirements for patentability. Furthermore, unless stated otherwise, the amendments to the claims were made to simply to make express what had been implicit in the claims as originally worded and therefore are not narrowing amendments that would create any type of prosecution history estoppel.

Specification/Claim Amendments

Applicants believe all claim amendments are supported by the specification and no new matter has been added. For clarification, specific support for the some amendments is provided below. All specification references are to the published specification (US 2004/0133244).

Currently Amended claim 1 has the limitation that

“a computer having programming to initiate and run recurring self-tests, which include at least some portion of the defibrillation circuitry and to perform a rescue, the self-tests occurring at intervals and capable of determining an operational status of the external defibrillator.”

Amendments to this limitation are supported in paragraphs [0043]-[0056]. More specifically, the specification makes clear that the AED performs self-tests to determine its operational status, and that the recurring self-tests are conducted at intervals, such as daily, weekly, monthly, or every three months. In addition, the specification states that the start of a recurring self-test is controlled by the PIC 16. Someone skilled in the art would interpret this to mean that programming is initiating and running the self-tests.

Currently Amended claim 1 has the additional limitation that

“a switch for a user to ~~switching~~ the external defibrillator from OFF to ON, wherein ON activates the defibrillation circuitry and its associated programming to perform a rescue, and OFF does not activate the defibrillation circuitry and its associated programming to perform a rescue but allows self tests to be conducted.”

Amendments to this limitation are supported in paragraph [0050] wherein the specification states that “[t]ests are performed in ‘silent mode’ where no user interface elements are exercised.” In other words, the external defibrillator from the user’s perspective is OFF but capable of performing functions, such as self-tests. It is inherent that OFF means the external defibrillator is not performing its user function, i.e., a rescue and that ON means that it is.

Finally, Currently Amended claim 1 has the limitation that

“an active status indicator comprising a light source that illuminates, the light source operated by the programming running on the computer, wherein the light source has a first illumination continually to indicate to an observer that the external defibrillator is OFF and that the most recent self-test has determined that the operational status is normal and thus the external defibrillator is ready to operate normally when turned ON and that presently maintenance is not required.”

Amendments to this limitation are supported as follows. As explained above, the self-tests are conducted at intervals, therefore it is inherent that there must be a “most recent self-test.” Further, as explained in paragraph [0043], in the disclosed embodiment, the PIC 16 “flashes” an ASI 30 to indicate the AED status. In addition, these “flashes” occur at every interval, and it is these intervals that are counted to determine when it is appropriate to conduct a self-test. Thus, as the intervals are counted to determine when to conduct a self-test, and that a “flash” occurs with each interval, it is inherent that the first illumination is continuous between self-tests and that the ASI 30 between self-tests is giving the status of the AED based on the “most recent self-test.”

Claim Rejections Under 35 U.S.C. §112

Claims 1-2, 4-5, and 7-48

The Examiner has rejected claims 1-2, 4-5, and 7-48 under 35 U.S.C. § 112, first paragraph, stating that the specification does not provide support for “a computer” or a “computer running programming” in combination with the other elements in the claims. In response, Applicants submit that the original specification fully supports the claimed limitation. For example, the original specification states the following:

[A] first processor programmed to periodically test the operability of the defibrillation circuitry and a second processor in communication with the first processor. The AED further includes a visual indicator, as described above, positioned at the exterior of the enclosure that is operatively connected to the second processor. The second processor is programmed to control the visual indicator in response to the periodic test results provided to it by the first processor. Alternatively, the first and second processors may be combined into a single processor.

Para [0008] of the published specification (US 2004/0133244).

This text describes at least one processor that is programmed to periodically test the defibrillation circuitry and to control the visual indicator. The definition of a computer¹ is “an electronic machine that performs high-speed mathematical or logical calculations ... in accordance with a predetermined program.” THE AMERICAN HERITAGE DICTIONARY 304 (2d College ed. 1982). This definition is consistent with the disclosure in the original specification regarding “a first processor programmed to periodically test” and a “second processor ... programmed to control the visual indicator.”

Additionally, Section 2163.02 of the MPEP provides that “subject matter of the claim need not be described literally (i.e., using the same terms or *in haec verba*) in order for the disclosure to satisfy the description requirement.” Accordingly, the original specification described the claimed limitation in such a way as to reasonably convey to one skilled in the

¹ For additional context (although after Applicants’ filing date), another definition for computer is: “Also called **processor**. an electronic device designed to accept data, perform prescribed mathematical and logical operations at high speed, and display the results of these operations. Dictionary.com, “computer,” in Dictionary.com Unabridged (emphasis in original). Source location: Random House, Inc. <http://dictionary.reference.com/browse/computer>. Available: <http://dictionary.reference.com>. Accessed: August 27, 2010.

relevant art that the inventors, at the time the application was filed, had possession of the claimed invention. Thus, Applicants request withdrawal of this rejection.

The Examiner also rejected these claims by stating that the specification does not provide support for an “ultimate self-test” in combination with the other elements in the claims. Although Applicants submit that the original specification fully described and supported an “ultimate self-test” as previously claimed, Applicants have amended the claims to replace that term with the “most recent” self-test. Accordingly, Applicants request withdrawal of this rejection.

Claims 9, 15, and 41

The Examiner has rejected claims 9, 15, and 41 under 35 U.S.C. § 112, second paragraph. By this response, these claims have been amended to delete the reference to the ASI and to identify a “second” indicator. This amendment is supported in paragraph [0068] of the filed application. No new matter has been added. This amendment traverses the Examiner’s rejection.

Claims 1 and 8

The Examiner has rejected claims 1 and 8 under 35 U.S.C. § 112, second paragraph, for a lack of clarity in how the circuitry can be OFF but still operate.

By this response, these claims have been amended to clarify that the ON/OFF status controlled by the switch is the ON/OFF status of the external defibrillator as perceived by a user of the external defibrillator. Thus, there is no contradiction in the status of the defibrillation circuitry performing self-tests, while the external defibrillator is OFF. In addition, a limitation has been added to distinguish an ON external defibrillator from one that is OFF. More specifically, the external defibrillator when OFF does not initiate a rescue but is capable of conducting self-tests and when ON initiates a rescue. This amendment traverses the Examiner’s rejection.

Applicants have similarly modified claims 36 and 40.

Claim 8

The Examiner has rejected claim 8 as to the limitation of a removable battery pack. The claim has been amended to remove this limitation to moot the issue. However, the removal of this limitation should not be construed as requiring the battery pack to be non-removable. More precisely, power is required and whether the battery pack has the characteristic of being removable or not does not go to this issue. This amendment traverses the Examiner's rejection.

Claims 4 and 5

The Examiner has rejected claims 4 and 5 stating there are no means or structures set forth during the ultimate self-test to determine that maintenance is required. The specification makes clear that the programming is capable of performing recurring self-tests to determine the operational status of the external defibrillator. Para [0045-0056]. In addition, those skilled in the art would interpret a "self-test" as inherently having the capability of determining a status of whatever the self-test is evaluating. As such, Applicants submit that as to this aspect of the claim it would be clearly understood by those skilled in art.

Claim 8

The Examiner has rejected claim 8 stating it is unclear how the light source is "operated autonomously." The Examiner further states that if the programming is operating the light source, it is not free from outside control, thus it is not operating autonomously. The claim has been amended to remove the word "autonomously."

The claim makes clear that the active status indicator comprises a light source and the light source is illuminated, i.e., activated, by the programming. Thus, illumination of the light source is precipitated by the programming and not the action of a user, i.e., the programming determines when and how the light source will be illuminated. Also, see discussion above under Specification/Claim Amendments for claim 1 as to the operation of the PIC 16 in conjunction with the active status indicator. Also, see paragraphs [0043-0050] of the specification.

Claim Rejections Under 35 U.S.C. § 102/103

FINCKE REFERENCE

In the Office Action, the Examiner rejected Claims 1, 2, 4-5, and 36-40 under 35 U.S.C. § 102 as allegedly being anticipated by, or in the alternative made obvious over, Fincke et al. (hereinafter “Fincke”). Claims 1, 36, and 40 are independent.

102 Rejection

The Examiner states that Fincke discloses an AED with a removable battery pack connected to the circuitry. The Examiner further states that “[s]ince the battery pack is part of the defibrillation [circuitry], and since it provides power to the defibrillation circuitry,” the battery is part of the defibrillation circuitry.

Applicants respectfully submit that Fincke discloses an AED 16 with a removable power supply 10 and not a removable battery pack. Fincke’s removable power supply, *which contains no battery*, is a backup power AC supply to the AED’s 10 own internal power supply, i.e., a battery 54. Col. 2, lines 28-29 and Col. 3, lines 38-39. As such, the AED 10 to which Fincke’s removable power supply is attached is fully capable of *normal operation* without Fincke’s removable power supply 16 being attached. In other words, Fincke’s device *is not a necessary* component of the AED 10.

While a claim term is to be given its broadest *reasonable interpretation* consistent with the specification, Applicants believe it is *unreasonable* to extend the claim term “defibrillation circuitry” to include circuitry that is not required to perform a rescue (i.e., to administer a defibrillation shock).

As a result, the structure of Fincke’s removable power supply cannot disclose the invention as claimed in independent claims 1, 36, and 40. Thus, these claims are allowable, as are the claims depending therefrom.

In the alternative, the Examiner states that the Fincke’s device contains five LEDs, which the Examiner considers an active status indicator. The LEDs identified by the Examiner are LED 52d and LED 52e.

Claim 1 has the limitation that the active status indicator light source illuminate with a first illumination indicating the operational status is *normal and thus the external defibrillator when turned on is ready to operate normally*. Fincke states that LED 52d indicates a fault in

either the power supply or the battery. Col. 5, Lines 23-43. Thus, a lit LED 52d does not indicate that the external defibrillator is ready to operate normally as required by claim 1.

As to LED 52e, the Examiner notes that LED 52e lights when the measurement circuits 80 make a determination as to the status of the output voltage of the battery 54. Fincke states that an illuminated LED 52e indicates that the power supply should be plugged in to an AC source. Col. 5, lines 23-43. It, therefore, is inherent that an illuminated LED 52e is indicating that the output voltage of the battery 54 in the defibrillator 16 is undesirably low. Thus, LED 52e like LED 52d is indicating a fault condition, which is exactly opposite of what is required in claim 1.

In conclusion, neither LED 52d nor LED 52e when lit is indicating that the defibrillator 16 is ready to operate normally, as required by claim 1.

As to the Examiner's 102 rejection, Applicants submit that the Examiner has failed to find in Fincke each and every limitation in claim 1, and similarly in independent claims 36 and 40. More specifically, the Examiner has failed to find the limitation of an active status indicator comprising a light source that has a first illumination that when illuminated indicates that the defibrillation circuitry is ready to operate normally when the defibrillator is turned ON. For this reason, Fincke does not anticipate Applicants' pending claim 1, 36, or 40, or the claims that depend therefrom.

103 Rejection - Fincke Alone

The Examiner's 103 rejection based on Fincke is grounded in the finding that it would have been obvious to modify Fincke to contain an on/off switch. This modification does not overcome the missing elements discussed above.

Applicants submit that Fincke alone does not disclose, teach, suggest, or make obvious at least the features of claim 1, discussed above; thus, claim 1 is allowable. As claim 1 is allowable, so are the claims depending therefrom. In addition, independent claims 36 and 40 contain a similar limitation; thus, those claims and their associated dependent claims are allowable.

Claim Rejections Under 35 U.S.C. §103

OLSON REFERENCE

In the Office Action, the Examiner rejected Claims 1-2, 8-10, 12-16, 19-22, 25-30, 33-38, and 40-48 under 35 U.S.C. § 103 as allegedly being obvious over Olson et al. (hereinafter “Olson”), or in the alternative, Olson in view of Fincke.

Olson Alone

The Examiner states that Olson discloses an AED having a rescue switch 18 and a visual maintenance indicator 20, which the Examiner considers an active status indicator. Furthermore, the Examiner states that during an open-lid self-test, the maintenance indicator is switched to a yellow color indicating a maintenance required state. In other words, maintenance indicator 20 is yellow when a fault condition exists.

Claim 1 requires that the active status indicator have a first illumination when a self-test determines that the AED defibrillation circuitry is ready to operate normally, i.e., no faults. Thus, by the Examiner’s own analysis, this element has not been found.

The Examiner then makes the assertion that it would have been obvious to change out Olson’s maintenance indicator 20 with a light to enhance notification. At this time, Applicants defer challenging this assertion, as the changing out suggested by the Examiner does not correct the deficiency discussed above. Nevertheless, Applicants submit that such a modification of the Olson device would not have been obvious at the time of Applicants’ invention.

Applicants submit that Olson alone does not disclose, teach, suggest, or make obvious at least these features of claim 1; thus, claim 1 is allowable. As claim 1 is allowable, so are the claims depending therefrom. In addition, independent claims 8, 36, and 40 contain a similar limitation; thus, those claims and their associated dependent claims are allowable.

Olson in view of Fincke

The Examiner then uses Fincke as alternate support for the assertion that it is obvious to modify Olson by changing Olson’s maintenance indicator 20 to a light source. By the Examiner’s own obviousness rationale, which states “in order to provide the predictable results of notifying the operator of required maintenance,” the Examiner admits that the combination of Olson and Fincke does not find the limitation in claim 1 that the active status indicator illuminate

to indicate that the operational status of the defibrillator is normal and ready to operate, i.e., no maintenance required.

Applicants submit that Olson in view of Fincke does not disclose, teach, suggest, or make obvious at least the features of claim 1; thus, claim 1 is allowable. As claim 1 is allowable, so are the claims depending therefrom. In addition, independent claims 8, 36, and 40 contain a similar limitation; thus, those claims and their associated dependent claims are allowable.

Summary

The Examiner's reliance on finding indicators that indicate a fault condition, or a need for maintenance, ignores a claim limitation that is found in every independent claim. As such, Applicants submit independent claims 1, 8, 36, and 40, as well as the claims depending therefrom, are allowable.

No Waiver

All of Applicants' arguments and amendments are without prejudice or disclaimer. Applicants have not addressed each specific rejection of the independent and dependent claims because Applicants submit that the independent claims are allowable over the documents of record, as discussed above. Applicants have not acquiesced to any such rejection and reserve the right to address the patentability of any additional claim features in the future.

CONCLUSION

Applicants submit the foregoing as a full and complete response to the Office Action. Applicants submit that this Amendment and Response places the application in condition for allowance and respectfully request such action. If any issues exist that can be resolved with an Examiner's Amendment or telephone conference, please contact Applicants' representative at 404-572-2809.

Respectfully submitted,

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